Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 10. This sheet, which includes Fig. 11, replaces the original sheet including Figs. 10 and 11. In Fig. 10, the referenced digit "Y" has been changed to "Z".

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

REMARKS

Claims 45-83 are pending in the application.

Appropriate headings have been added to the specification, and claims from the literal translation have been replaced by claims drafted in conformity with U.S. Patent practice. An abstract has also been added to the specification.

The application in its amended state is believed to be in condition for allowance. However, should the Examiner have any comments or suggestions, or wish to discuss the merits of the application, the undersigned would very much welcome a telephone call in order to expedite placement of the application into condition for allowance.

Respectfully submitted,

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RWB:rac

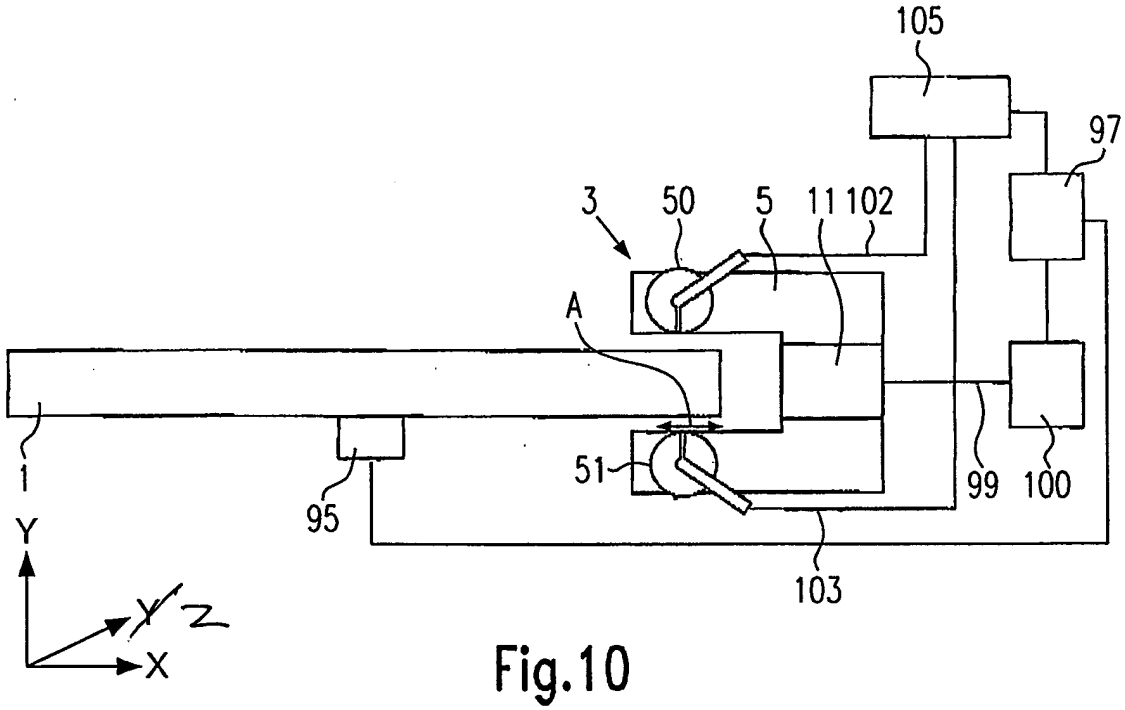

Fig.10

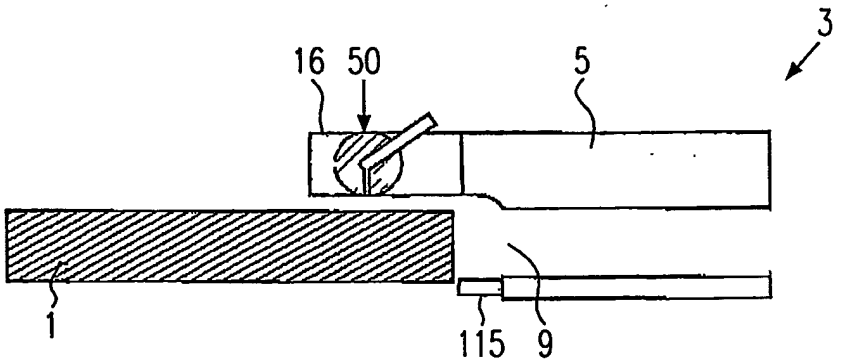

Fig.11

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 – 44: Cancelled

45. (New) A device for cleaning the edges of substrates, comprising:

at least one nozzle element (50, 51) for supplying medium to a substrate; and

at least one cleaning head (3) adapted to receive said at least one nozzle element (50, 51), wherein said at least one cleaning head comprises a main body (5) in which is formed a medium-suctioning port (9) and an adjoining medium-suctioning duct (11), wherein said at least one cleaning head (3) further comprises at least one first flange (15, 16) extending from said main body (5) and having a flat side (24, 25) that faces toward said medium-suctioning port (9) and extends essentially perpendicular to a surface of said main body (5) that contains said medium-suctioning port, wherein said at least one nozzle element (50, 51) is adapted to be provided on said at least one first flange (15, 16) so as to be spaced from said main body (5), wherein at least one nozzle element has at least one outlet port (61, 71, 81, 91) that is adapted to open in the direction that said flat side (24, 25) faces, wherein said at least one outlet port is directed substantially perpendicular to said flat side (24, 25), wherein said at least one outlet port is recessed relative to said flat side (24, 25) or is flush therewith, and wherein during a cleaning process, said flat side (24, 25) is adapted to be spaced by 0.05 to 0.5 mm, especially up to 0.3 mm, and preferably by 0.2 mm from a surface of the substrate.

46. (New) A device according to claim 45, which includes a movement mechanism for producing a relative movement between said at least one cleaning head and a substrate, wherein said movement mechanism is adapted to be controlled such that during the cleaning process it maintains the spacing between said flat side (24, 25) and the surface of the substrate.

47. (New) A device according to claim 45, wherein said at least one cleaning head (3) further comprises at least one second flange (17, 18) extending from said main body (5) and having a flat side (26, 27) that faces toward said medium-suctioning port (9) and extends essentially perpendicular to said surface of said main body (5) that contains said medium-suctioning port, and wherein said flat sides (24, 25; 26, 27) of said at least one first flange (15, 16) and of said at least one second flange (17, 18) extend substantially parallel to one another and are spaced apart by a distance that is greater than a thickness of the substrate to be cleaned.

48. (New) A device according to claim 47, wherein said flat sides (24, 25; 26, 27) are spaced apart by 0.1 to 1 mm, especially up to 0.6 mm, and preferably by 0.4 mm greater than the thickness of the substrate to be cleaned.

49. (New) A device according to claim 47, which includes at least one further nozzle element (51) for supplying medium, wherein said at least one further nozzle element (51) is adapted to be provided on said at least one second flange (17, 18) so as to be spaced from said main body, wherein said at least one further nozzle element has at least one outlet port (61, 71, 81, 91) that is adapted to open in the direction that said flat side (26, 27) of said at least one second flange (17, 18) faces, wherein said at least one outlet port is directed substantially perpendicular to said flat side (26, 27) of said at least one second flange, and wherein said at least one outlet port is recessed relative to said flat side (26, 27) of said at least one second flange or is flush therewith.

50. (New) A device according to claim 47, wherein said at least one cleaning head (3) has a symmetrical construction relative to a plane that is centrally disposed between said flat sides of said at least one first flange and said at least one second flange.

51. (New) A device according to claim 45, wherein said at least one nozzle element (50) is pivotably disposed on said at least one first flange (15, 16).

52. (New) A device according to claim 51, wherein said at least one nozzle element is disposed on said at least one first flange so as to be pivotable between 0° and 40°, preferably between 0° and 20°, relative to a line that is perpendicular to said flat side of said at least one first flange.

53. (New) A device according to claim 45, wherein said at least one nozzle element has a plurality of outlet ports (71, 81) or has a slit-shaped outlet port.

54. (New) A device according to claim 53, wherein said plurality of outlet ports or said slit-shaped outlet port extends along a line that is parallel to said surface of said main body that contains said medium-suctioning port.

55. (New) A device according to claim 45, wherein said at least one outlet port of said at least one nozzle element is spaced from said surface of said main body that contains said medium-suctioning port by a distance of between 2.5 and 6 mm, especially 3 mm.

56. (New) A device according to claim 45, which includes at least one medium-supply means that communicates with said at least one nozzle element, and a control device (97) for regulating a supply of medium such that during the cleaning process, the medium is present at said at least one outlet port of said at least one nozzle element in a substantially unpresurrized state, or the medium is conveyed under pressure through the at least one nozzle element and is directed onto the substrate to be cleaned.

57. (New) A device according to claim 56, wherein said medium is conveyed through said at least one nozzle element at a pressure of between 10 and 30 KPa, preferably 20 KPa.

58. (New) A device according to claim 45, which includes a control device for separately controlling each nozzle element.

59. (New) A device according to claim 45, wherein said at least one first flange is provided with a recess in which said at least one nozzle element is at least partially disposed.

60. (New) A device according to claim 45, wherein said medium-suctioning port (9)

has a circular shape.

61. (New) A device according to claim 45, wherein said medium-suctioning port (9) has a diameter that is approximately 0.2 mm greater than a thickness of the substrate to be cleaned.

62. (New) A device according to claim 45, wherein said medium-suctioning duct (11) tapers away from said medium-suctioning port (9).

63. (New) A device according to claim 45, which includes a suction device (100) that is adapted to communicate with said medium-suctioning duct (11) and a control device (97) for controlling said suction device.

64. (New) A device according to claim 45, which includes a substrate support (95) and a means for producing relative movement between said substrate support and said at least one cleaning head (3).

65. (New) A device according to claim 45, which includes a control device for setting an overlap of said at least one first flange with a surface of the substrate to be cleaned.

66. (New) A device according to claim 45, which includes a control device for controlling a relative movement between said at least one cleaning head (3) and the substrate to be cleaned such that said at least one cleaning head travels along at least a portion of at least one edge of the substrate at a constant distance therefrom.

67. (New) A method of cleaning substrates, including the steps of:

disposing a cleaning head having at least one nozzle element for supplying medium and at least one medium-suctioning port adjacent to a substrate to be cleaned such that said at least one nozzle element is directed toward at least one edge region of a side of the substrate to be cleaned and said medium-suctioning port is disposed in a region of said at least one nozzle element adjacent to an end face of the substrate, wherein a distance between a flat side of a flange of the cleaning head that carries said at least one nozzle element, and at least

one edge region of the substrate to be cleaned, is set to 0.05 to 0.5 mm, especially up to 0.3 mm, and preferably 0.2 mm;

applying a cleaning fluid onto said at least one edge region of the substrate via said at least one nozzle element; and

completely suctioning the cleaning fluid off via said medium-suctioning port and an adjoining medium-suctioning duct.

68. (New) A method according to claim 67, wherein said cleaning head is provided with at least two nozzle elements for supplying medium that face one another, wherein during said disposing step said at least one edge region of the substrate to be cleaned is disposed between said at least two nozzle elements, and wherein a distance between a flat side of a flange of said cleaning head that carries a second one of said nozzle elements, and the at least one edge region of the substrate to be cleaned, is set to 0.05 to 0.5 mm, especially up to 0.3 mm, and preferably 0.2 mm.

69. (New) A method according to claim 67, which includes delivering the cleaning fluid to said at least one nozzle element such that the cleaning fluid is present at an outlet port thereof in an essentially unpressurized state and, via said medium-suctioning port and the adjoining medium-suctioning duct, is drawn out of said at least one nozzle element, and is applied to the at least one edge region of the substrate to be cleaned, essentially by the force of the suctioning.

70. (New) A method according to claim 67, which includes applying the cleaning fluid with pressure through said at least one nozzle element onto at least one edge region of the substrate to be cleaned.

71. (New) A method according to claim 70, wherein the pressure is in a range of between 10 and 30 KPa, preferably 20 KPa.

72. (New) A method according to claim 67, which includes applying the cleaning fluid

essentially perpendicular to the at least one edge region of the substrate, or applying the cleaning fluid to the at least one edge region of the substrate at an angle that deviates by 0 to 40°, preferably 0 to 20 °, from a line that is perpendicular to the surface of the substrate.

73. (New) A method according to claim 68, which includes separately controlling said nozzle elements.

74. (New) A method according to claim 73, which includes operating said nozzle elements at different pressures, and/or supplying different fluids to said nozzle elements.

75. (New) A method according to claim 67, which includes the further step of producing a relative movement between said cleaning head and the substrate such that said cleaning head moves along at least a portion of at least one edge of the substrate.

76. (New) A method according to claim 75, which includes keeping a distance of said medium-suctioning port from an end face of the substrate constant during movement of said cleaning head.

77. (New) A method according to claim 75, which includes effecting relative movement between the substrate and the cleaning head by movement of at least one of the substrate and said cleaning head.

78. (New) A method according to claim 76, wherein the distance of the medium-suctioning port from the end face of the substrate is set between 0.5 and 2 mm, especially 1 mm, during a cleaning process.

79. (New) A method according to claim 67, which includes cleaning between 2 and 5 mm, especially 3 mm, of an edge region of the substrate.

80. (New) A method according to claim 67, which includes establishing a width of an edge region that is to be cleaned by setting an amount of overlap between said at least one nozzle element and a side surface of the substrate, or establishing a width of an edge region of the substrate to be cleaned at least partially by pivoting said at least one nozzle element.

81. (New) A method according to claim 67, wherein, upon conclusion of a cleaning process, first the step of applying a cleaning fluid is terminated, and after a predetermined time interval after the termination of the applying step, the step of suctioning the cleaning fluid off is terminated.

82. (New) A method according to claim 67, which includes controlling at least one of a supply of medium and suctioning off of cleaning fluid as a function of a contour of the substrate.

83. (New) A method according to claim 67, which includes, when said at least one nozzle element reaches a region of a corner of a substrate, interrupting a supply of medium before said at least one nozzle element reaches the corner, while continuing the suctioning off of the cleaning fluid.